*Photo by P. G. Gates*

A MADONNA AMONG THE MOKI

# THE HOPI INDIANS

By WALTER HOUGH

Curator Division of Ethnology, United States National Museum,
Washington, D. C.

CEDAR RAPIDS, IOWA
THE TORCH PRESS, 1915

them he notes the march of the seasons, and at the proper time the town-crier chants his announcement from the house-tops.

The clear air of Tusayan renders the task of the sun-priest easy; this primitive astronomer has the best of skies for observation. By day the San Francisco peaks, a hundred miles away, stand clearly silhouetted on the horizon; by night the stars are so brilliant that one can distinguish objects by their light.

The Hopi also know much of astronomy, and not only do they have names for the planets and particular stars, but are familiar with many constellations, the Pleiades especially being venerated, as among many primitive peoples. The rising and position of the Pleiades determine the time of some important ceremonies when the "sweet influences" reign. Any fixed star may be used to mark off a period of time by position and progress in the heavens as the sun is used by day. The moon determines the months, but there is no word for "year" or for the longer periods of time. Days are marked by "sleeps," thus today is *pui* or "now"; the days of the week are two sleeps, three sleeps, etc.; *tabuco* is "yesterday."

While the larger periods of time are kept with accuracy, so that the time of beginning the ceremonies varies but little from year to year, the Hopi have poor memories for dates. No one knows his age, and many of these villages seem to live within the shifting horizons of yesterday and tomorrow. The priests, however, keep a record of the ceremonies by adding to their *tiponi*, or palladium of their society, a feather for each celebration. At Zuñi a record of the death of priests of the war society is kept by making scratches on the face of a large rock near a shrine, and by this method a Hopi woman keeps count of the days from the child's birth to the natal ceremony. Ask a Hopi when some event happened, and he will say, "*Pai he sat o,*" meaning "some time ago, when my father was a boy"; stress on the word means a longer time, and if the event was long beyond the memory of man, the Indian will almost shake his head off with emphasis.



The only notched time-stick is that jealously guarded by the sun priest, and no one knows just how he makes his calculations from it.

As for dinner time, the great sun and "the clock inside" attend to that; *dawa yamu, dawa nashab,* and *dawa poki* stand for "sunrise," "noonday," and "sunset." If the Hopi makes an appointment for a special hour, he points to where the sun will be at that time. The seasons are known to him in a general way as the time of the cold or snow, the coming back of the sun (winter solstice), the time of bean or corn planting, the time of green corn, the time of harvest, etc., but there is a calendar marked by the ceremonies held during each month.

Perhaps these children of the sun are happier in not being slaves of the second as we have become. Our

of necessity become used to doing without water. So far as one can determine, the rats, mice, squirrels, badgers, coyotes, prairie-dogs, skunks, and other denizens of the sand-wastes so rarely get a good drink of water that they seem to have outgrown the need of it. Cattle and horses have also developed such powers of abstinence as might put a camel to shame. There is a belief in the Western country that at least one of the burrows of a prairie-dog town penetrates to water, but whether this be true or not, judging from some of the locations of these queer animal villages the tribe of gophers must contain adepts in abysmal engineering.

One does not live long in the wilds of Arizona without becoming weatherwise and, perhaps, skilled in signs and trails like a frontiersman. The country is so open that the weather for a hundred miles or more can be taken in at a glance and the march of several storms observed at once, even though the sound of wind and thunder be far out of hearing. At Flagstaff, for instance, it is easy to tell when the Hopi are rejoicing in a rain, although it is more than a hundred miles away.

In a country with so little rainfall as Tusayan and in which the soil consists largely of sand with underlying porous rocks, springs are few and their flow scanty. The rivers, also, during most of the year, flow far beneath their sandy beds, which only once in a while are torn by raging torrents. This is one of



the many novelties of a country that probably offers more attractions than any land on earth.

Around the springs the life of the Hopi comes to a focus, for here, at all hours of the day, women and girls may be seen filling their canteens, getting them well adjusted in the blankets on their backs for the toilsome climb up the trail. A feeling of admiration tinged with pity arises for these sturdy little women who in the blanket tied across the forehead literally by the sweat of their brows carry half a hundredweight of water up a height of nearly half a thousand feet. *Mang i uh*, "tired?" one asks them. *Okiowa mang i uh*, "Yes, alas, very tired!" they answer, these slaves of the spring.

At the edge of the water in the spring, where nothing can disturb them, are green-painted sticks with dangling feathers. These are offerings to the gods who rule the water element. At none of the frequent ceremonies of the Hopi are the springs forgotten, for a messenger carries prayer-sticks to them and places them in the water. In former times offerings of pottery and other objects were thrown into springs by devout worshippers.

Around the springs are gardens in which onions and other "garden sauce" are grown. When it is possible, a little rill is led from the spring into the gardens. The growing greens lend much to the drear surroundings of the springs, but the plants must be enclosed by a stone wall to keep away marauding burros and goats.

At least one spring at each pueblo is dug out and enlarged, forming a pool at the bottom of an excavation ten feet deep and thirty in diameter, with a graded way leading down to the water. These springs are convenient for watering the thirsty stock, but they are especially used in the ceremonies. During the Flute Dance, for example, they form the theater of an elaborate ceremony in which the priests wade in the spring and blow their flutes in the water.

All the springs have been given descriptive names. At Walpi, there are Dawapa, "sun spring"; Ishba, "wolf spring"; Canelba, "sheep spring"; Kokiungba, "spider spring"; Wipoba, "rush spring"; Kachinapa, "kachina spring," and a number of others, around which cluster many associations dear to the good people of the East Mesa. Like the Hopi, every other human being who fares in the dry Southwest unconsciously becomes a devotee of water worship and eventually finds himself in the grip of the powers of Nature whom the Indians beseech for the fertilizing rain.

Springs are often uncertain quantities in this region. Earthquakes have been known to swallow up springs in one place and to cause them to burst out at another far away. One can readily imagine what a terrible calamity such a phenomenon can be in so dry a country, for the only thing the people can do under such circumstances is to move and to move quickly. It seems probable that some of the many ancient Indian settlements that make the Southwest a ruin-



strewn region have been caused by just such fickleness in the water supply.

When modern engineering comes to the aid of the Hopi in storing the occasional vast rushes of water for use throughout the year, a new era will dawn for the Peaceful People. They may then become prosperous farmers and gradually forget the days when they invoked the powers of nature with strange charms and ceremonies.

If the Hopi know well the springs, they are not less perfect in knowledge of plants that are useful to them. One day Kopeli, the former Snake chief, undertook to teach his pupil, Kuktaimu, the lore of the plants growing near the East Mesa. They set out for a flooded cornfield near the wash, and long before they reached it, they could hear the watchers emitting blood-curdling yells to scare away the hated *angwishey*, crows, that from time to time made a dash for the toothsome ears.

It goes without saying that the day was beautiful, for in August thunder-cloud masses often fill the sky with graceful forms, tinted beneath by a rosy glow reflected from the surface of the red plains. The rain had started the vegetation anew and the deep green cornfields showed its benign influences.

Kopeli was communicative, but Kuktaimu, although having been blessed by Salako with a Hopi name, was weak in the subtleties of Hopi speech and missed many points to which, out of politeness, he responded

he had found a fellow practitioner. He requested samples of several of the plants, and when they were given him, stored them away in his pouch with every evidence of satisfaction.

The Hopi priests are also very glad to receive any herb coming from far off, especially from the sea-coast, "the land of the far water," as they call it. They treasure such carefully and mix it with sacred smoking tobacco or introduce it into the "charm liquid" which is used in every ceremony to mix the paint for the prayer-sticks and to sprinkle during their strange rites.

An American farmer might be at a loss to recognize a Hopi cornfield when he saw one. In the usually dry stream beds or "washes" he would see low clumps of vegetation, arranged with some regularity over the sand. This is the Hopi cornfield, so planted in order to get the benefit of rains which, falling higher up, may fill the washes, for the summer thunder-storms are very erratic in their favors.

The Hopi farmer sets out to plant, armed only with a dibble which serves as plow, hoe, and cultivator combined. Arriving at the waste of sand which is his unpromising seed-field, he sits down on the ground, digs a hole, and puts in perhaps twenty grains, covering them with the hands. Whether he has any rule like

> One for the cutworm,
> One for the crow,
> One for luck,
> And three for to grow,



is doubtful, but in the years when cutworms are likely to be plentiful he plants more corn to the hill.

One hill finished, he gets up, moves away about ten feet, sits down, and goes through the same process. He never thins the corn, but leaves the numerous stalks close together for shade and protection from the winds. His care of the field consists merely in hoeing the weeds and keeping a watch on the crows, which he frightens away by demoniac shouts. His scarecrows are also wonders of ingenuity, and many a time one takes them for watchful Indians.

When the corn is fit for roasting ears the Hopi get fat and there is feasting from morn till night. Tall columns of smoke arise from the roasting pits in the fields. These large pits are dug in the sand, heated with burning brush, filled with roasting ears, and closed up tightly for a day. The opening of a pit is usually the occasion of frolicking and feasting, where laughter and song prevail. Some of the corn is consumed at once in making puddings and other dishes of which the Hopi prepare many, and what remains is dried on the cob and hung in bunches in the houses for the winter.

The ears of the Indian corn are close to the ground and are hidden by the blades, which touch the sand. The blades are usually tattered and blown away by the wind, so that by the time the corn is ripe, the fodder is not of much value. The ripe corn is gathered and laboriously carried by back-loads up the steep mesa to

the houses, where it is stored away in the corn chamber. Here the ears are piled up in symmetrical walls, separate from the last year's crop, which may now be used, as the Hopi, taught by famine, keep one year's harvest in reserve. Once in a while, the women bring out the old corn, spread it on the roof to sun, and carefully brush off each ear before returning it to the granary, for in this dry country, though corn never molds, insect pests are numerous.

Among the superstitions connected with corn the Hopi believe that the cobs of the seed corn must not be burned until rain has fallen on the crop for fear of keeping away or "drying up" the rains.

No cereal in the world is so beautiful as Hopi corn. The grains, though small, are full and highly polished; the ears are white, yellow, red of several shades, a lovely rose madder, blue, a very dark blue or purple which the Hopi call black, and mottled. A tray of shelled corn of various colors looks like a mosaic.

In the division of labor, the planting, care of the corn in the fields and the harvesting belong to the men. When the brilliant ears are garnered, then the women's work begins. No other feature of the Hopi household is so interesting as the row of three or more slabs placed slantwise in stone-lined troughs sunk in the floor; these are their mills. They are of graded fineness, and this is also true of the oblong hand stones, or *manos*, which are rubbed upon them with an up and down motion as in using a washboard. Sometimes three women work at the mills; the first woman grinds the corn into coarse meal on the coarse stone and passes her product over to the second, who grinds it still finer, and the third finishes it on the last stone; sometimes one woman alone carries the meal through the successive stages, but it is a poor household that cannot furnish two grinders. The skill with which the woman spreads the meal over the grinding slab by a flirt of the hand as the *mano* is brought up for the return stroke is truly remarkable, and the rhythmic precision of all the motions suggests a machine. The weird song sung by the grinders and the rumble of the mill are characteristic sounds of the Hopi pueblos, and as the women grinders powder their perspiring faces with meal while they work, they look well the part of millers. Little girls are early taught to grind, and they often may be prevailed upon to display their accomplishment before visitors.



The finely ground meal is piled and patted into conical heaps on the flat basket trays, making quite an exhibition of which the Hopi women are very proud, much meal indicating diligence as well as a bountiful supply of the staff of life. Grinding is back-breaking work, and one humanely wishes that the Hopi women, and especially the immature girls, could be relieved of this too heavy task.

While corn-meal enters into all Hopi cooking as the chief ingredient, most of it is made into "paper-bread," called *piki*, resembling more than anything

stews. Often food is colored with harmless vegetable dyes, no doubt with the deep-laid scheme on the part of the mother of the household to cause the familiar fare to be attacked with renewed zest. Our tradition of "spring lamb with mint sauce" is duplicated by stewed rabbit with *nanakopshi* greens, which, witr various other herbs, are put to appropriate uses by the master of the Hopi culinary art.

## IV

## THE WORKERS

The Hopi believe in the gospel of work, which is evenly divided between the men and the women.

When it is said that people work, there is, unconsciously perhaps, a desire to know the reason, which is rarely a subject of curiosity when people amuse themselves. Come to think of it, the answer is an old one, and a Hopi, if asked why he works, might put forward the first great cause, *nusha*, "food."

Not only must the Hopi work to supply his wife and little ones, but he must do his share for his clan, which is the large family of blood-relations, bound together by the strongest ties and customs of mutual helpfulness. This family is an object of the greatest pride, a little world of its own, in which every member from the least to the greatest has duties and responsibilities. So all labor — men, women, and the little ones, who add their tiny share. The general division of work gives the woman the affairs of the household, and the man the cultivation of the fields. Men plant corn and the older women often help hoe it, and the women and children frequently go down to the fields and watch the crops to keep off birds.

While excavating at Winslow one day some of the workmen looked up toward the north and cried out, *Hopi tu, Hopi tu,* "The Hopi are coming." It was some time before our eyes could pick them out, but soon three men could be seen running, driving a little burro in front at the top of its speed. These were Walpi men journeying to a creek some miles beyond Winslow to get sacred water for one of their ceremonies. Similar journeys are made to San Francisco Mountains for pine boughs and to the Cataract of the Colorado to trade with the Havasupai. The Spanish conquerors were struck with the ability of the Hopi runners, and they record that the Indians could easily run in one day across the desert to the Grand Canyon, a distince which the Spaniards required three days' march to accomplish.

Often a crowd of Hopi young men will go out afoot to hunt rabbits, and woe to the bunny that comes in reach! He is soon run down and dispatched with their curved boomerangs.

Though baseball, foot-ball, and many other athletic games of civilization have no place among the Hopi sports, of foot racing they are as passionately fond as even the ancient Greeks. Almost every one of the many ceremonies has its foot race in which the whole pueblo takes the greatest interest, for all the Hopi honor the swift runners.

This brings to mind the story of how Sikyabotoma lost his hair. Sikyabotoma, who bears the school



name of John, is the finest specimen of physical manhood at the East Mesa. John is not unaware of this gift of nature, as he poses on all occasions out of sheer pride.

One cannot observe that John got anything out of his American schooling; he seemingly does not speak a word of English, and he is beyond all reason taciturn for a Hopi. It may be that John is a backslider, having forgotten or thrown over his early education and relapsed to his present state under the influence of Hopi paganism.

As runner for the Walpi Flute Society, his duty is to carry the offerings to the various shrines and springs, skirting on the first day the entire circuit of the cultivated fields of the pueblo, and coming nearer and nearer each day till he tolls the gods to the very doors of Walpi. It is no small task to include all the fields in the blessings asked by the Flute priests, since the circuit must exceed twenty miles. Each day Sikyabotoma, wearing an embroidered kilt around his loins, his long, glossy hair hanging free, stands before the Flute priests, a brave sight to behold. They fasten a small pouch of sacred meal at his side and anoint him with honey on the tip of the tongue, the forehead, breast, arms, and legs, perhaps to make him swift as the bee. Then he receives the prayer-sticks, and away he goes down the mesa as though he had leaped down the five hundred feet, his long, black hair streaming. He stops at a spring,

to know where the waters flowed, embarked in a hollow log, closed except a small orifice, and went down the Great Colorado to its mouth, thus antedating the perilous feat of Major Powell by a long time! Here he found the Spider Woman, who prompted him in his dealings with the people living there. After many strange adventures, during which he was taught the rites now practiced by the Snake society, he won the daughter of a Snake chief and brought her to his country. The first fruits of this union were snakes, who bit the Hopi and who were driven away on this account. Later, children were human, and with them originated the Snake clan, whose wanderings brought them at last to Walpi; and tradition affirms that they were among the first arrivals there.

The Flute Ceremony, which alternates with the Snake-Antelope Ceremony, is most pleasing and interesting. Visitors to Hopiland in August of the proper year are always charmed with the dramatic performance and beautiful songs of the Flute society. In Walpi there is only one priesthood of the Flute, but in other pueblos of the Middle Mesa and in Oraibi there are two, one of the Blue Flute and the other of the Gray Flute.

On the first day the sand altar is made and at night the songs are begun. Within the kiva the interminable rites go on, and daily the cycle of songs accompanied with flutes is rehearsed. A messenger clad in an embroidered kilt and anointed with honey runs with flowing hair to deposit prayer-sticks at the



shrines, encircling the fields in his runs and coming nearer the pueblo on each circuit. During the seventh and eighth days a visit is made to three important springs where ceremonies are held, and on the return of the priests they are received by an assemblage of the Bear and Snake societies, the chiefs of which challenge them and tell them that if they are good people, as they claim, they can bring rain.

After an interesting interchange of ceremonies the Flute priests return to their kiva to prepare for the public dance on the morrow. When at 3 A. M. the belt of Orion is at a certain place in the heavens the priests file into the plaza, where a cottonwood bower has been erected over the shrine called the entrance to the underworld. Here the priests sing, accompanied with flutes, the shrine is ceremonially opened and prayer-sticks placed within, and they return to the kiva. At some of the pueblos there is a race up the mesa at dawn on the ninth day as in other ceremonies.

On the evening of the ninth day the Flute procession forms and winds down the trail to the spring in order: a leader, the Snake maiden and two Snake youths, the priests, and in the rear a costumed warrior with bow and whizzer. At the spring they sit on the north side of the pool, and as one of the priests plays a flute the others sing, while one of their number wades into the spring, dives under the water, and plants a prayer-stick in the muddy bottom. Then taking a flute he again wades into the spring and

People lived on the Little Colorado River near Winslow. The name of the region where several towns were scattered over an extent of fifteen miles or so was Homolobi, "the place of two views." Here the people lived centuries before they came to the precipitous mesas of Hopiland. Later, when explorers tested the accuracy of Masi's tradition, they found in the low mounds that mark the ruined towns of Homolobi, many wonderful relics of the people who lived there before America was even a name. So Masi was proved a reliable traditionist, and an "honisht man," as Toby, the Tewa, says.

It is truly remarkable how the traditions and legendary lore have been carried down from ancient times among the Hopi. The moderns, who are accustomed to place reliance in recorded history, might be inclined to doubt the accuracy of oral tradition, if there were not much reason to believe otherwise. For instance, the Hopi have a number of traditions of the Spanish friars who lived in their country after the discovery by Coronado about three hundred and seventy-five years ago. An Oraibi Indian relates one of these minor traditions which might be expected to have been lost in the lapse of time but has been passed down with complete preservation of all the details.

It is thus: the friars who lived at Oraibi did not relish the water from the springs near the pueblo. Now the water at Moenkapi, the summer village of Oraibi, is excellent. The priests used to compel the



Indians to bring water from that place. It chanced that the Indian whose duty it was to carry water from Moenkapi, not liking to bring water many miles *por el amor de Dios*, one day filled his canteen with the water of Oraibi and brought it to the friars. On tasting the water, they accused the Indian of deceit and compelled him to go to Moenkapi for more.

An old chief of Walpi gave a long and circumstantial account of the rule of the friars, against whom even at this late day he was very bitter. He said with emphasis, "*Castil shimuno pash kalolomi*," "The Spanish are very bad," and related how they strove to enslave the people, making them carry large cottonwood beams from the Little Colorado for the churches. To our knowledge, a few of these beams from the old churches, curiously carved, are now doing service in the ceilings of pagan kivas or underground rooms where secret ceremonies are carried on. The "long gowns," as the Indians also call them, might have held this tractable, timid people long in subjection in the non-essential things, such as labor, but as the old chief relates, they interfered with their time-honored ceremonies of ancestor and nature worship. "They said the dances were very bad and we must stop them," explained the old chief. There was still another grievance that the Hopi allege against the friars, and that was their treatment of the women. Interference with religion and custom have been at the bottom of most of the troubles of humanity. At